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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,571	02/27/2004	Slaven Radic	0108-0239	9252
33787 7590 01/24/2007 JOHN J. OSKOREP, ESQ. ONE MAGNIFICENT MILE CENTER 980 N. MICHIGAN AVE. SUITE 1400 CHICAGO, IL 60611			EXAMINER RAMPURIA, SHARAD K	
			ART UNIT 2617	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/789,571	RADIC ET AL.	
	Examiner	Art Unit	
	Sharad Rampuria	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application. |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2617

DETAILED ACTION

I. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

Continued Examination Under 37 CFR 1.114

II. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/14/2006 has been entered.

Disposition of the claims

III. The current office-action is in response to the Arguments/Remarks filed on 6/12/06. Accordingly, Claim 5 is cancelled, thus, Claims 1-4, 6-34 are imminent for further assessment as follows:

Claim Rejections - 35 USC § 102

IV. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2617

Claims 1-4, 6-7, 11-34, are rejected under 35 U.S.C. 102 (b) as being anticipated by Ayoub et al. [US 6477363].

As per claim 1, Ayoub teaches:

In a mobile station, a method of facilitating the determination of Global Positioning System (GPS) location information without disrupting voice communications of a voice call involving the mobile station (Abstract and Col.1; 60-64) comprising the acts of:

Causing GPS navigational-type data to be received through a wireless transceiver of the mobile station and stored in memory of the mobile station prior to voice communications of a voice call involving the mobile station; (i.e. locating the cellular phone like triangulation would apply. The GPS receiver comprises a GPS antenna 11 which feeds the received signals from the satellites into a GPS module 12 calculating the position of the mobile telephone resulting in a data item for longitude and latitude, resp; Col.4; 2-12, Col.2; 1-15)

Receiving through a user interface of the mobile station, a voice call request for a voice call by an end user; (i.e. the communication between the mobile phone and the authority is established; Col.4; 20-35)

In response to receiving the voice call request: deriving GPS assistance data based on the stored GPS navigational-type data; tuning the wireless transceiver to a GPS frequency to receive signals from a GPS system through the wireless transceiver; (i.e. capture the position of mobile; Col.4; 2-19, Col.5; 4-8)

Causing a GPS fix to be performed with signals from a GPS system through a wireless transceiver using the GPS assistance data to thereby obtain GPS measurement data; (i.e. capture the position of mobile; Col.4; 20-35) and

After the GPS fix is performed, causing the voice call to be established and maintained for the mobile station through the wireless communication network with the wireless transceiver; (i.e. the voice-call connection is continued; Col.4; 48-57)

Causing the GPS measurement data to be transmitted to a location server in the wireless communication network for calculating the location of the mobile station. (i.e. the call connection between the mobile phone and the authority is continued; Col.4; 20-35)

As per claim 2, Ayoub teaches:

The method of claim 1, wherein the voice call comprises a 911 emergency call. (e.g. 911; Col.5; 1-8 and Col.1; 60-64)

As per claim 3, Ayoub teaches:

The method of claim 1, wherein the act of causing the GPS navigational-type data to be received and stored in memory of the mobile station comprises the further acts of regularly causing the GPS navigational-type data to be received and stored in the memory during one or more time periods that the mobile station would have otherwise been in an idle mode of operation. (i.e. the position data is acquired repetitively in constant time intervals, e.g. every five minutes, and is stored in a controller 13 together with a time stamp representing the time of position acquisition; Col.4; 12-19)

As per claim 4, Ayoub teaches:

The method of claim 1, wherein the act of causing the GPS navigational-type data to be received comprises the further act of causing the GPS navigational-type data to be received from the location server. (Col.4; 48-57)

As per claim 6, Ayoub teaches:

The method of claim 1, further comprising: identifying a trigger signal indicative of the voice call request at the mobile station; wherein the act of identifying the trigger signal includes at least one of the following: identifying a detection of the mobile station being taken out of a holster, identifying a selection of a phone application of the mobile station, identifying a selection of one or more digits of a telephone number for the voice call, identifying a selection of entry of the telephone number for the voice call, and receiving the trigger signal from a personal computer (PC) or laptop. (i.e. Upon activation of the emergency call by typing 911 on the keypad of the handset or by pressing a panic button, the cellular phone generates the DID number that corresponds to the position obtained from the GPS module.; Col.5; 17-38 and Col.3; 5-17)

As per claim 7, Ayoub teaches:

The method of claim 1, further comprising: identifying a phone number of the voice call; and wherein the act of causing the GPS fix to be performed is contingent on the phone number of the voice call. (i.e. The central office saves the DID and passes the call to a controller 24 which

Art Unit: 2617

is able to perform automatic number identification (ANI) and/or evaluate the mobile identification number (MIN).; Col.5; 23-38)

As per claim 11, Ayoub teaches:

The method of claim 1, wherein the location server includes a Position Determination Entity (PDE). (i.e. Col.3; 66-Col.4; 12)

As per claim 12, Ayoub teaches:

The method of claim 1, further comprising: receiving the location of the mobile station from the location server through the wireless communication network. (Col.4; 36-47)

As per claim 13, Ayoub teaches:

The method of claim 1, further comprising: refraining from causing the GPS fix to be performed during the voice communications of the voice call. (Col.4; 20-35)

As per claim 14, Ayoub teaches:

The method of claim 1, wherein at least a portion of the same wireless receiver is utilized for both acts of performing the GPS fix and causing the voice call to be established and maintained. (Col.4; 48-57)

As per claims 15, 28, Ayoub teaches:

A mobile station (1; Fig.1, Col.3; 66-Col.4; 2), comprising:

Art Unit: 2617

A user interface; (keypad; Col.4; 15-19)

A wireless receiver and transmitter; (15; Fig.1; Col.4; 15-19)

One or more processors coupled to the wireless receiver and transmitter; memory coupled to the one or more processors; (13; Fig.1; Col.4; 12-14)

The one or more processors being operative to facilitate the determination of Global Positioning System (GPS) location information of the mobile station by: Causing GPS navigational-type data to be received through a wireless transceiver of the mobile station and stored in memory of the mobile station prior to voice communications of a voice call involving the mobile station; (i.e. locating the cellular phone like triangulation would apply. The GPS receiver comprises a GPS antenna 11 which feeds the received signals from the satellites into a GPS module 12 calculating the position of the mobile telephone resulting in a data item for longitude and latitude, resp; Col.4; 2-12, Col.2; 1-15)

Receiving through a user interface of the mobile station, a voice call request for a voice call by an end user; (i.e. the communication between the mobile phone and the authority is established; Col.4; 20-35)

In response to receiving the voice call request: deriving GPS assistance data based on the stored GPS navigational-type data; tuning the wireless transceiver to a GPS frequency to receive signals from a GPS system through the wireless transceiver; (i.e. capture the position of mobile; Col.4; 2-19, Col.5; 4-8)

Causing a GPS fix to be performed with signals from a GPS system through a wireless transceiver using the GPS assistance data to thereby obtain GPS measurement data; (i.e. capture the position of mobile; Col.4; 20-35) and

Art Unit: 2617

After the GPS fix is performed, causing the voice call to be established and maintained for the mobile station through the wireless communication network with the wireless transceiver; (i.e. the voice-call connection is continued; Col.4; 48-57)

Causing the GPS measurement data to be transmitted to a location server in the wireless communication network for calculating the location of the mobile station. (i.e. the call connection between the mobile phone and the authority is continued; Col.4; 20-35)

As per claims 16, 29, Ayoub teaches:

The mobile station of claims 15, 28, wherein the voice call comprises a 911 emergency call. (Col.5; 1-8 and Col.1; 60-64)

As per claim 17, Ayoub teaches:

The mobile station of claim 15, wherein the causing of the GPS navigational-type data to be received and stored in the memory is performed on a regular basis during one or more time periods that the mobile station would have otherwise been in an idle mode of operation. (i.e. the position data is acquired repetitively in constant time intervals, e.g. every five minutes, and is stored in a controller 13 together with a time stamp representing the time of position acquisition; Col.4; 12-19)

As per claim 18, Ayoub teaches:

The mobile station of claim 15, wherein the causing of the GPS navigational-type data to be received comprises causing the GPS navigational-type data to be received from the location

Art Unit: 2617

server through the wireless communication network. (Col.4; 48-57)

As per claim 19, Ayoub teaches:

The mobile station of claim 15, further comprising: identifying a trigger signal indicative of the voice call request at the mobile station; wherein the act of identifying the trigger signal includes at least one of the following: identifying a detection of the mobile station being taken out of the holster, identifying a selection of a phone application of the mobile station, identifying a selection of one or more digits of a telephone number for the voice call, identifying a selection of entry of the telephone number for the voice call, and receiving the trigger signal from a personal computer (PC) or laptop. (i.e. Upon activation of the emergency call by typing 911 on the keypad of the handset or by pressing a panic button, the cellular phone generates the DID number that corresponds to the position obtained from the GPS module.; Col.5; 17-38 and Col.3; 5-17)

As per claim 20, Ayoub teaches:

The mobile station of claim 15, wherein the one or more processors are further operative to: identify a phone number of the voice call; and wherein the act of performing the GPS fix is contingent on the phone number of the voice call. (i.e. The central office saves the DID and passes the call to a controller 24 which is able to perform automatic number identification (ANI) and/or evaluate the mobile identification number (MIN).; Col.5; 23-38)

As per claim 21, Ayoub teaches:

In a mobile station, a method of facilitating the determination of Global Positioning System (GPS) location information without disrupting voice communications of a voice call (Abstract and Col.1; 60-64) comprising the acts of:

Identifying a trigger signal indicative of a request to terminate a voice call which is maintained for the mobile station; in response to identifying the trigger signal: (i.e. a panic button; Col.4; 15-19)

Tuning the wireless transceiver to a GPS frequency to receive signals from a GPS system through the wireless transceiver; (i.e. capture the position of mobile; Col.4; 2-19, Col.5; 4-8)

Causing a GPS fix to be performed with a GPS system using GPS assistance data to thereby obtain GPS measurement data; (i.e. capture the position of mobile; Col.4; 20-35)

Causing the GPS measurement data to be transmitted to a location server in the wireless communication network for calculating the location of the mobile station; and causing the voice call to be terminated. (i.e. the call connection between the mobile phone and the authority is continued; Col.4; 20-35)

As per claim 22, Ayoub teaches:

The method of claim 21, wherein the voice call comprises a 911 emergency call. (Col.5; 1-8 and Col.1; 60-64)

As per claim 23, Ayoub teaches:

The method of claim 21, further comprising: causing the GPS assistance data to be received in response to identifying the trigger signal. (i.e. Upon activation of the emergency call

Art Unit: 2617

by typing 911 on the keypad of the handset or by pressing a panic button, the cellular phone generates the DID number that corresponds to the position obtained from the GPS module.;

Col.5; 17-38 and Col.3; 5-17)

As per claim 24, Ayoub teaches:

The method of claim 21, further comprising: refraining from causing the GPS fix to be performed during the voice communications of the voice call. (Col.4; 20-35)

As per claim 25, Ayoub teaches:

The method of claim 21, wherein at least a portion of the same wireless receiver is utilized for performing the GPS fix and maintaining the voice call. (Col.4; 48-57)

As per claim 26, Ayoub teaches:

The method of claim 21, further comprising: identifying a phone number of the voice call; and wherein the acts of causing a GPS fix and causing the GPS measurement data to be transmitted before ending the voice call is contingent on the phone number for the voice call. (i.e. The central office saves the DID and passes the call to a controller 24 which is able to perform automatic number identification (ANI) and/or evaluate the mobile identification number (MIN).; Col.5; 23-38)

As per claim 27, Ayoub teaches:

Art Unit: 2617

The method of claim 21, wherein the trigger signal is based on an actuation of an END key. (i.e. a panic button.; Col.5; 17-38 and Col.3; 5-17)

As per claim 30, Ayoub teaches:

The mobile station of claim 28, wherein the one or more processors are further operative for: causing the GPS assistance data to be received in response to identifying the trigger signal. (i.e. Upon activation of the emergency call by typing 911 on the keypad of the handset or by pressing a panic button, the cellular phone generates the DID number that corresponds to the position obtained from the GPS module.; Col.5; 17-38 and Col.3; 5-17)

As per claim 31, Ayoub teaches:

The mobile station of claim 28, wherein the one or more processors are further operative for: refraining from causing the GPS fix to be performed during the voice communications of the voice call. (Col.4; 20-35)

As per claim 32, Ayoub teaches:

The mobile station of claim 28, wherein at least a portion of the same wireless receiver is utilized for performing the GPS fix and maintaining the voice call. (Col.4; 48-57)

As per claim 33, Ayoub teaches:

The mobile station of claim 28, wherein the one or more processors are further operative for: identifying a phone number of the voice call; and wherein the acts of causing the GPS fix

Art Unit: 2617

and causing the GPS measurement data to be transmitted before ending the voice call is contingent upon the phone number for the voice call. (i.e. The central office saves the DID and passes the call to a controller 24 which is able to perform automatic number identification (ANI) and/or evaluate the mobile identification number (MIN).; Col.5; 23-38)

As per claim 34, Ayoub teaches:

The mobile station of claim 28, wherein the trigger signal is based on an actuation of an END key at the user interface. (i.e. a panic button.; Col.5; 17-38 and Col.3; 5-17)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2617

Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ayoub et al. [US 6477363] in view of Leung [US 6907238].

As per claim 8, Ayoub teaches all the particulars of the claim except wherein the GPS navigational-type data comprises GPS ephemeris data and/or GPS almanac data. However, Leung teaches in an analogous art, that the method of claim 1, wherein the GPS navigational-type data comprises GPS ephemeris data and/or GPS almanac data. (i.e. ephemeris data and almanac data; Col.1; 30-35) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Ayoub including the GPS navigational-type data comprises GPS ephemeris data and/or GPS almanac data in order to provide a method and apparatus to facilitate the locating and tracking of a wireless terminal, which may be advantageously used for E-911 service.

As per claim 9, Ayoub teaches all the particulars of the claim except wherein the GPS assistance data comprises at least one of: GPS satellite PseudoRandom Noise (PRN) code identifying data, Doppler frequency data, time delay window data, and bit contents of the GPS navigational data. However, Leung teaches in an analogous art, that method of claim 1, wherein the GPS assistance data comprises at least one of: GPS satellite PseudoRandom Noise (PRN) code identifying data, Doppler frequency data, time delay window data, and bit contents of the GPS navigational data. (i.e. ephemeris data and almanac data; Col.8; 23-28)

Art Unit: 2617

As per claim 10, Ayoub teaches all the particulars of the claim wherein the GPS measurement data comprises GPS pseudorange data. However, Leung teaches in an analogous art, that the method of claim 1, wherein the GPS measurement data comprises GPS pseudorange data. (i.e. pseudorange data; Col.3; 67-Col.4; 7)

Response to Amendment

V. Applicant's arguments with respect to claims 1-4, 6-34 has been fully considered but is moot in view of the new ground(s) of rejection.

Conclusion

VI. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharad Rampuria whose telephone number is (571) 272-7870. The examiner can normally be reached on M-F. (8:30-5 EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or EBC@uspto.gov.



Sharad Rampuria
Patent Examiner
Art Unit 2617